

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2005/000445

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl.⁷ G06K 19/00, H01L 27/04, H01L 21/768

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl.⁷ G06K 19/00, H01L 27/04, H01L 27/12, H01L 21/768, H01L 29/78

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2005, Japanese Registered Utility Model Gazette 1994-2005, Japanese Gazette Containing the Utility Model 1996-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2001-013874 A (MATSUSHITA ELECTRIC WORKS, Ltd.), 2001.01.19, paragraphs [0025] - [0029], Fig.4,5 (Family none)	1,2,4,5,14,15 3,6-13
Y A	JP 2001-014442 A (MIYOTA Co., Ltd.) 2001.01.19, paragraphs [0011] - [0015], Fig.3-6 (Family none)	1,2,4,5,14,15 3,6-13
Y A	JP 2000-020665 A (TOSHIBA CORPORATION), 2000.01.21, paragraphs [0021] - [0036], Fig.1-9 (Family none)	1,2,4,5,14,15 3,6-13
Y A	US 2003/0030689 A1 (SEIKO EPSON CORPORATION), 2003.02.13, paragraphs [0040] - [0066], [0106] - [0114], [0150] - [0152], [0163] - [0165], Fig.1,2,8,12A,12B & JP 2003-080694 A 2003.03.19, paragraphs [0027] - [0049], [0082] - [0089], [0125] - [0127], [0138] - [0140], Fig.1,2,8,12	4,5 3,6,7

☒ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

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"E" earlier application or patent but published on or after the international filing date

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"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

03.03.2005

Date of mailing of the international search report

22.3.2005

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 2003-318133 A (SEIKO EPSON CORPORATION), 2003.11.07, paragraphs [0056] - [0070], [0085] - [0099], [0136] - [0147], Fig. 3, 8-11, 19, 20 (Family none)	4, 5 3, 6, 7
A	JP 2001-109866 A (HITACHI MAXELL, Ltd.), 2001.04.20, paragraphs [0007] - [0016], Fig. 1-6 (Family none)	1-15
A	JP 2003-331248 A (LINTEC CORPORATION), 2003.11.21, paragraphs [0005] - [0021], Fig. 1-4 & WO 2003/098545 A1	1-15
A	JP 2003-123047 A (SHARP CORPORATION), 2003.04.25, paragraphs [0030] - [0056], Fig. 2-6 (Family none)	3-7